GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2046
ANSWERED ON:05.08.2005
GENETIC DIVERSITY OF TIGER POPULATION
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether a programme to conserve genetic diversity of tiger population in the country has been launched as appeared in `The Hindu` dated of May 20, 2005;

(b) if so, the facts and details thereof ; and

(c) the benefits likely to accrue to the country by launching this programme?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) Yes, Sir. The Department of Biotechnology has already established the ` Laboratory for conservation of endangered animals(LACONES)` at the Centre for Cellular and Molecular Biology (CCMB), Hyderabad jointly with the Central Zoo Authority, Ministry of Environment and Forests, Council of Scientific and IndustrialResearch and the Government of Andhra Pradesh.

(b) LACONES is monitoring genetic variation among populations of endangered animals including the tiger through DNA fingerprinting. Besides cells, semen, eggs and embryos are being cryopreserved for ex-situ conservation. Studies have revealed that Indian tigers show moderate genetic variability of about 26%. Scientists have developed a non-invasive method for extraction of DNA from faecal samples and wherever possible, hair samples, for assessing the genetic diversity in tigers.

(c) The studies would be useful in determining the population and assessing the genetic diversity in Indian tiger population. It would reveal the genetic health of the population and provide insights as to whether inbreeding depression has set in. The information could be used to plan breeding programmes and to improve the genetic variability of the tiger population.